

RCA UPDATE

January 8, 2024

NDSU continues to set records for annual research expenditures

For the fourth year in a row, North Dakota State University has reached a new all-time high in research expenditures and leads all North Dakota higher education institutions in terms of overall research expenditures (the dollar value of the funds spent by an institution on research).

In the most recently reported fiscal year (FY22), NDSU reached a milestone with \$174.9 million in research expenditures, surpassing totals of \$164 million in FY21 and \$155.6 million in FY20.

The FY22 amount places NDSU among the top 100 public research universities according to the National Science Foundation's Higher Education Research and Development Survey (HERD). The HERD survey rankings were recently released and are based upon research and development expenditure data submitted annually to the NSF. For FY22, NDSU ranks 99 out of 410 public institutions.

Colleen Fitzgerald, NDSU vice president for research and creative activity, noted that this year's HERD survey shows the momentum of NDSU's research initiatives and that the institution's researchers are tackling issues important to the region and the country.

"NDSU has a proven recipe for success: serve North Dakotans through the research we conduct, because the kinds of challenges that face North Dakotans represent larger global challenges. NDSU faculty develop solutions for those challenges, which leads to national recognition and additional funding," she said. "The value proposition of NDSU research for the state is evident in these

rankings. It reaffirms the priority that North Dakota legislators put on diversification of the state's economy through research in this year's legislative session. NDSU has consistently delivered on this priority for the state."

Read more >>

Additional data from this year's HERD survey, along with historical survey data, is available on the RCA HERD PowerBi Report



Sparking Big Ideas: Interdisciplinary Research Planning Grants

This planning grant program seeks to initiate early-stage project development to help catalyze collaborative, interdisciplinary teams among diverse disciplines in order to pursue innovative, ambitious solutions to impactful research questions that fit within NDSU's <u>strategic priorities</u>, or align with prior and/or existing research investments at NDSU. Priority will go to teams without a prior track record of collaboration, or to teams that are expanding to include new disciplinary expertise.

Team composition should be reflective of the nature of the proposed research and the team's approach should rely on the perspective and expertise of multiple disciplines. This program is intended to help teams develop collaborations and prepare to pursue external sponsored research support for the proposed project. North Dakota has made it a priority to invest in the diversification of the state economy through research, and NDSU faculty are uniquely poised to bring their expertise together in teams to address challenges that cannot be solved by a single discipline.

Learn more and apply >>

Josie Hayden joins NDSU Research Foundation

Josie Hayden has joined the NDSU Research Foundation (NDSURF) team as a business development and licensing manager. Reporting to NDSURF Executive Director Zane Gernhart, Josie will play a key role in identifying potential inventions for disclosure, especially focusing on new and undisclosed NDSU technologies with commercial potential. Her responsibilities will include actively engaging with campus researchers, managing a portfolio of patent applications, and ensuring the protection of intellectual property disclosed to NDSU.



Josie will contribute to the Foundation's growth by increasing both the number of inventions and the number of researchers disclosing them. Additionally, she will work on developing and managing relationships with business partners and faculty-inventors to establish strategic connections for sponsored research and licensing opportunities.

Josie brings experience from her previous roles in clinical research operations in the Fargo area and as an RCA research integrity administrator at NDSU. She can be reached at josie.hayden@ndsu.edu or (701) 231-8173.

We're hiring: Director of Animal Resources / Institutional Attending Veterinarian

We are seeking a dynamic, collaborative and experienced person to serve as the Director of Animal Resources / Institutional Attending Veterinarian. This person will provide oversight and management of the university's animal care and use program and serve as the Institutional Attending Veterinarian.

COME WORK WITH US!

The NDSU Office of Research and Creative Activity is hiring

DIRECTOR OF ANIMAL RESOURCES/INSTITUTIONAL ATTENDING VETERINARIA

Provides oversight and management of the university's animal care and use program and serves as the institutional attending veterinarian.

Learn more: https://tinyurl.com/NDSUVET

NDSU RESEARCH AND RESEARCH AN

Learn more and apply >>

OPEN NOW:

Apply for Research Support Grants

Due to faculty input, we have increased the amount available for our Research Support Grants to \$2,500. These funds are targeted at helping defray the costs of research, creative, or scholarly activities that lead to success of future grant proposals or research and creative outputs.

Learn more and apply >>



DDA/Artificial Intelligence Professional Development Scholarship Program

The Dakota Digital Academy is offering five \$1,000 scholarships to NDUS faculty for artificial intelligence (AI) professional development. Each scholarship can be used to cover conference registration or related fees, travel, and per diem, not to exceed the maximum amount of \$1,000.

To be eligible for one of the scholarships, please submit the following:

- Name of conference/professional development experience
- Specific list of costs, to include registration or related fees, travel, and per diem expenses
- Describe in detail how you plan to incorporate the information learned into your classroom teaching

To be eligible for consideration, please submit your entry by Friday, January 26, 2024. Submissions will be reviewed starting Monday, January 29, 2024.

Please send your submission to <u>dakota.digital.academy@ndus.edu</u>. If you have any questions, please contact Jerry Rostad at the NDUS System Office: <u>jerry.rostad@ndus.edu</u>.



USDA seeking 40 Climate Change Fellows to Help Farmers and Rural Small Businesses Access Clean Energy Funds

U.S. Department of Agriculture (USDA) is hiring 40 Climate Change Fellows to help with the record numbers of applications from farmers, ranchers and rural small businesses seeking funding for clean energy projects under the <u>Rural Energy for America Program</u> (REAP).

The new positions are being funded by President Biden's Inflation Reduction Act and two fellows each will be based in Illinois, Iowa, Michigan and Minnesota. One fellow each will be based in Alabama, Arizona, Arkansas, California, Colorado, Delaware/Maryland, Florida, Georgia, Idaho, Indiana, Kentucky, Louisiana, Maine, Mississippi, North Carolina, North Dakota, Nebraska, New Jersey, Nevada, Ohio, Oregon, South Dakota, Tennessee, Texas, Utah, Virginia, Washington, Wyoming and Puerto Rico.

Apply for a fellowship >>

Applications for AI SUSTEIN Summer REU Now Open

The AI SUSTEIN Program ("Artificial Intelligence on Sustainable Energy Infrastructure Network") is led by North Dakota State University in collaboration with the University of Arkansas, UNLV, and Nueta Hidatsa Sahnish College, to establish collaborative research, workforce development, and education to investigate the potential of Artificial Intelligence (AI) as a driving force for bringing about changes to infrastructures and industries.



This program will feature a 2024 summer research experience in STEM fields including manufacturing engineering, civil & environmental engineering, electrical engineering, computer engineering & science at UNLV. The program is open to undergraduate students currently pursuing a degree at a college or university with an expected graduation date after December 2024.

Applications are due by February 4, 2024.

Learn More >> https://etap.nsf.gov/award/177/opportunity/5648

Call for Proposals: University Research Collaboration Program

North Dakota State University (NDSU) and University of North Dakota (UND) announce a joint call for the **University Research Collaboration Program**, funded by the Economic Diversification Research Funds (EDRF) appropriated in the 2023 Legislative session. The University Research Collaboration Program requires a project where faculty from UND collaborate with faculty at NDSU and include faculty or students from a third North Dakota institution (i.e., a predominantly undergraduate institution, polytechnic institution and/or a Tribal college or university). A call next fiscal year is also anticipated for the year two funds.

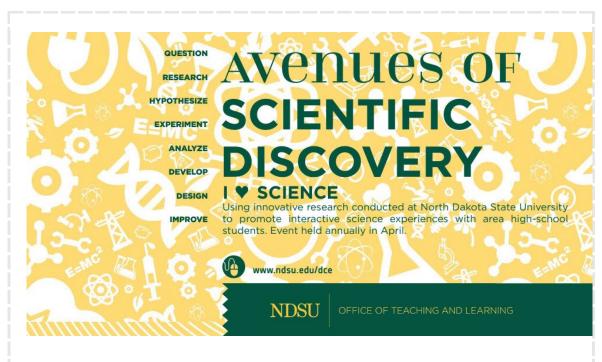
The newly launched University Research Collaboration Program seeks pilot collaboration projects that foster research collaboration across institutions. The funds should support activities (data collection, materials, experimental or instrumentation needs, etc.) for a pilot project to for submission to an external funder. All proposals must include NDSU, UND and a third higher education institution (NDUS or NDTCS) to be considered for funding.

Learn more and apply >>

Faculty Opportunities to Increase Broader Impacts of their Research

Avenues of Scientific Discovery

The Office of Teaching and Learning will host Avenues of Scientific Discovery, a workshop conference on Saturday, April 6, 2024, for area middle and high school students. The event will be focused on promoting Science, Technology, Engineering, and Math features both 45-minute and 90-minute sessions.



In order to ensure complete representation in all areas of STEM, female and minority faculty and graduate students are strongly encouraged to submit proposals to be considered workshop leaders. Presenting a workshop is a great opportunity to bring visibility to your department/program and build interest for prospective NDSU students.

Submit a proposal for a workshop presentation.

- Proposals are due by Friday January 12th, 2024
- Submit a proposal
- Questions? Contact <u>Sommer Korn</u>, Project Coordinator for the Office of Teaching and Learning
- More information about the event



The 2024 NDSU FIRST Robotics Competition - Hosted by the NDSU College of Engineering

NDSU will host two FIRST robotics tournaments during January 2024.

- Saturday, January 20, 2024
 FIRST Tech Challenge (FTC) for students in grades 7-12.
- Saturday, January 27, 2024
 FIRST LEGO League (FLL) for students in grades 4-8.

Both events will be held in Bentson-Bunker Fieldhouse.

Learn about FIRST Robotics Competition volunteer opportunities >>

Call for Proposals: Summer Undergraduate Biomedical Research Program

Deadline: January 20, 2024 11:59 p.m.

The NDSU Office of Research and Creative Activity (RCA) is seeking faculty mentors and research projects for a summer undergraduate biomedical research program. The program's participants will be undergraduate students attending colleges and universities in North Dakota. Funded by the North Dakota IDeA Network of Biomedical Research Excellence (ND INBRE), the program's goal is to expose the state's undergraduate STEM major students to careers in the biomedical sciences.

The 10-week program will run from May 28, 2024 to August 2, 2024. Participating students are expected to work 40 hours per week, conducting research independently, participating in weekly mentoring by faculty and project leaders, and attending workshops, trainings, and other activities organized by the RCA office. Through the funds received from the grant, the RCA office will cover the following costs for each undergraduate researcher:

- Summer positions will pay \$15/hour. It is expected that students will work
 40 hours per week. Overtime is not allowed.
- Funds up to \$500 will be available to purchase consumable research materials and for the use of NDSU core facilities.
- Student on-campus housing will be provided for non-NDSU students who would need to relocate to Fargo for the program.

Apply here >> https://ndsu.infoready4.com/#competitionDetail/1922717

DOE: Request for Information: Supercritical Carbon Dioxide-Based Turbomachinery for Concentrating Solar-Thermal Power Plants

This request for information (RFI) [<u>DE-FOA-0003270</u>] is intended to inform the U.S. Department of Energy (DOE) Solar Energy Technologies Office (SETO) on the specific research, development, and demonstration opportunities to enable near term deployment of supercritical carbon dioxide (sCO2) based turbomachinery for concentrating solar power plants.

Deadline: January 31, 2024; 4pm

DVMs and Vet Techs

Please update your Novelution profile with your current DVM or Vet Tech license. This ensures there is no delay when creating or being added to an IACUC protocol.

Where can I find institutional information to complete my proposal?



Many sponsor proposal application forms require standard information about the university, including frequently used numbers (DUNS, Unique Entity Identifier, Congressional District, Cage Code), contact information, and the authorized organizational representative.

All NDSU-specific institutional information is available <u>here</u> >>



Funding Landscape for AI & Machine Learning

In response to rapid advances in Artificial Intelligence and Machine Learning, this session will provide a primer on relevant funding trends for grant-seekers.

Hanover will cover recent funding priorities from major federal agencies and other funders as they relate to this field, while also highlighting notable programs through which grants are being awarded.

Thursday, January 25, 11:00 am

Presenters

- Clinton Doggett Senior Grants Advisor, Hanover Research
- Mallory Waters Grants Advisor, Hanover Research

Learn more and register >>

Join us for lunch to learn about the Spring 2024 NIH Grant Bootcamp

Join us for an <u>Info-Sharing Session</u> to learn more about the upcoming NIH Grant Bootcamp that will run from January to May with the intention of supporting grant submissions with June and September deadlines.

We will be providing lunch and coffee and we look forward to seeing you.

- January 11 from 11:30am-1:00pm
- Nueta
- Memorial Union

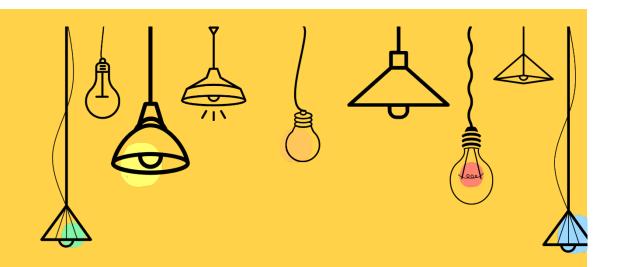
To facilitate planning, <u>please indicate if you're interested in attending this</u> bootcamp >>



SciENcv individual or small group sessions available

NSF now requires the use of <u>SciENcv</u> to generate your **BioSketch** and **Current and Pending Support** documents for *ALL* grant applications.

If you haven't already managed to login and create a needed biosketch and current and pending support, and you would like some assistance, please reach out to ndsu.researchdev@ndsu.edu to set up a session! We will accommodate in-person and zoom.



Have a big, bright idea about research at NDSU?

It's important that we continually challenge each other to come up with ambitious, big ideas in our research endeavors at NDSU. So we'd like to hear your ideas, and the bigger they are, the better.

While we can't promise all of them will succeed, we welcome you to share them - from an early concept or thought all the way to developed ideas that may just need some collaboration - send us an email (<u>bigideas@ndsu.edu</u>) and get the process started.

Upcoming Events at a Glance

NIH Grant Writing Workshop info-sharing session

January 11, 2024 at 11:30am-1:00 | Learn More >>

FY2025 programmatic requests to RCA deadline

January 19, 2024 | Learn more >>

 NIH: Diverse Voices, Intersectionality and the Health of Women -- "Graphic Medicine."

January 25, 2024, 2pm-3:00 | Learn more >>

• Funding Landscape for AI & Machine Learning

Thursday, January 25, 11:00am | Learn more >>

Funding Opportunities

- Breast Cancer Alliance: Exceptional Project Grants LIMITED
- Breast Cancer Alliance: Young Investigator Grants LIMITED
- DoD: Research Interests of the Air Force Office of Scientific Research
- DOE: Early Career Research Program
- DOE: Integrated Biological and Computational Low Dose Radiation Research
- DOJ: Advancing Women in Leadership LIMITED
- DOJ: Gender Responsive Training LIMITED
- Halo: Corn sample for food safety tests (liquid matrix)
- Halo: Improving sample preparation for pathogen testing molecular assays
- Institute of Education Sciences: Education Research and Development Center
- NEA: Grants for Arts Projects LIMITED
- Neogen Corporation: Mycotoxin detection in grain extracts
- New York Historical Society: Fellowship Opportunities
- NIH: Addressing Health and Health Care Disparities Among Sexual and Gender Minority Populations

- NIH: Translational Research in Maternal and Pediatric Pharmacology and Therapeutics
- NSF: Collaborative Research in Computational Neuroscience
- NSF: DCL Improving Undergraduate STEM Education Adaption, Implementation, and Dissemination (IUSE-AID)
- NSF: Emerging Mathematics in Biology
- NSF: Future of Semiconductors
- NSF: Mind, Machine and Motor Nexus
- NSF: Strengthening American Infrastructure
- RWJF: Evidence for Action: Indigenous-Led Solutions to Advance Health Equity and Wellbeing
- RWJF: Systems for Action: Systems and Services Research to Address Systemic Racism
- <u>USDA: NIFA Women and Minorities in Science, Technology, Engineering, and Mathematics Fields Program LIMITED</u>

Upcoming Limited Submission Program Deadlines

<u>Limited submission grant programs</u> are those that indicate a limit on the number of proposals that may be submitted by an institution for a particular deadline. A selection process becomes necessary if more applicants express interest in applying than NDSU is allowed to submit to the grant program. Email notifications of interest to ndsu.researchdev@ndsu.edu by **close of business** on the notification deadline date.

If you identify a limited submission opportunity that is not on the list below, please notify ndsu.researchdev@ndsu.edu.

There are no Upcoming Limited Submission Programs at this Time

The below limited submission grant programs did not receive notification of interest, so they are considered "First to Notify." Those who notify are given approval to move forward with a full proposal submission on a first come, first serve basis.

• <u>USDA: NIFA - Women and Minorities in Science, Technology, Engineering,</u> and Mathematics Fields Program

Deadline: February 9, 2024

Breast Cancer Alliance: Exceptional Project Grants

Deadline: LOI March 31, 2024

• Breast Cancer Alliance: Young Investigator Grants

Deadline: LOI March 31, 2024

• DOJ: Advancing Women in Leadership

Deadline: February 13, 2024; 11pm

• DOJ: Gender Responsive Training

Deadline: February 5, 2024; 11pm

NEA: Grants for Arts Projects

Upcoming Deadlines: February 15 and July 11, 2024

^^

Breast Cancer Alliance: Exceptional Project Grants – LIMITED

<u>Limited submission grant programs</u> are those that indicate a limit on the number of proposals that may be submitted by an institution for a particular deadline. A selection process becomes necessary if more applicants express interest in applying than NDSU is allowed to submit to the grant program.

<u>Notify RCA</u> – This program is First to Notify. Those who notify are given approval to move forward with a full proposal submission on a first come, first serve basis.

Breast Cancer Alliance invites clinical doctors and research scientists at any stage of their careers, including post docs, whose current proposal is focused on breast cancer, to apply for an <u>Exceptional Project Grant</u>. This award recognizes creative, unique and innovative research. This is a one year grant for a total of \$100,000.

Deadline: LOI March 31, 2024

LIMITED SUBMISSON: Only 2 LOIs allowed per Institution

۸۸

Breast Cancer Alliance: Young Investigator Grants – LIMITED

<u>Limited submission grant programs</u> are those that indicate a limit on the number of proposals that may be submitted by an institution for a particular deadline. A selection process becomes necessary if more applicants express interest in applying than NDSU is allowed to submit to the grant program.

<u>Notify RCA</u> – This program is First to Notify. Those who notify are given approval to move forward with a full proposal submission on a first come, first serve basis.

To encourage a commitment to breast cancer research, Breast Cancer Alliance invites clinical doctors and research scientists who are in the early stages of their careers, including post docs, whose current proposal is focused on breast cancer, to apply for funding for the <u>Young Investigator Grant</u>. This is a two-year grant for a total of \$125,000, with half the grant award being paid out each year.

Deadline: LOI March 31, 2024

LIMITED SUBMISSON: Only 2 LOIs allowed per Institution

۸۸

DoD: Research Interests of the Air Force Office of Scientific Research

The DoD's focus is on research areas that offer significant and comprehensive benefits to our national warfighting and peacekeeping capabilities [FA9550-23-S-0001]. These areas are organized and managed in two scientific branches, each with two teams:

Engineering and Information Sciences (RTA)

- ENGINEERING AND COMPLEX SYSTEMS (RTA1)
- INFORMATION AND NETWORKS (RTA2)

Physical and Biological Sciences (RTB)

- PHYSICAL SCIENCES (RTB1)
- CHEMISTRY AND BIOLOGICAL SCIENCES (RTB2)

Deadline: Open until closed

^^

DOE: Early Career Research Program

The purpose of this program [<u>DE-FOA-0003176</u>] is to support the development of individual research programs of outstanding scientists early in their careers and to stimulate research careers in the areas supported by the Office of Science (SC).

Programs:

Advanced Scientific Computing Research (ASCR)
Basic Energy Sciences (BES)
Biological and Environmental Research (BER)
Fusion Energy Sciences (FES)
High Energy Physics (HEP)
Nuclear Physics (NP)
Isotope R&D and Production (DOE IP)

Accelerator R&D and Production (ARDAP)

DOE: Integrated Biological and Computational Low Dose Radiation Research

The long-term goal for this research [DE-FOA-0003281] is to build on the understanding of radiation effects on cellular function and establish comprehensive datasets amenable to incorporation into increasingly capable AI/ML models to identify both transient and persistent changes in cellular metabolism that may be linked to adverse health outcomes.

LIMITED – One pre-application and application is accepted for each PI

Deadline: Pre-applications February 6, 2024; 4pm (required)

۸۸

DOJ: Advancing Women in Leadership - LIMITED

<u>Limited submission grant programs</u> are those that indicate a limit on the number of proposals that may be submitted by an institution for a particular deadline. A selection process becomes necessary if more applicants express interest in applying than NDSU is allowed to submit to the grant program.

<u>Notify RCA</u> – This program is First to Notify. Those who notify are given approval to move forward with a full proposal submission on a first come, first serve basis.

This <u>solicitation</u> is for a proposal to enter into a 12-month cooperative agreement to coordinate and deliver two training programs targeted for two different levels of women in leadership. For both programs, the National Institute of Corrections (NIC) will be providing the current training program agenda, modules, experiential resources, and the presentation slide deck to the agreement holder.

Deadline: February 13, 2024; 11pm

LIMITED SUBMISSION: Only one application per Institution

۸۸

DOJ: Gender Responsive Training – LIMITED

<u>Limited submission grant programs</u> are those that indicate a limit on the number of proposals that may be submitted by an institution for a particular deadline. A selection process becomes necessary if more applicants express interest in applying than NDSU is allowed to submit to the grant program.

<u>Notify RCA</u> – This program is First to Notify. Those who notify are given approval to move forward with a full proposal submission on a first come, first serve basis.

This <u>cooperative agreement</u> is for the development of a two-day Gender-Responsive Foundational Training and pilot for staff working in federal, state, local, and tribal correctional agencies. This two-day program will focus on the management of justice-involved women in custody or under supervision. The curriculum should include modules on the pathways that lead women into the criminal justice system, gender differences, the effects of abuse and trauma, medical and mental health concerns, and the parenting stressors of the women incarcerated and on supervision. It should also include demonstrations and skill building exercises.

Deadline: February 5, 2024; 11pm

LIMITED SUBMISSION: Only one application per Institution

Λ٨

Halo: Corn sample for food safety tests (liquid matrix)

The private company is <u>looking for</u> collaborators with experience creating standard protocols for mycotoxins detection in corn that can be used in a lateral flow assay. Alternatively, they would be interested in opportunities to purchase material that meets our requirements.

Solutions of interest include:

- Experts familiar with developing standard protocols for mycotoxins detection in corn
- Sample for corn "baseline extract" that is consistent (and will thus reduce the variability that occurs in assays due to matrix differences)

The application takes about one hour to complete.

Deadline: February 29, 2024

^^

Halo: Improving sample preparation for pathogen testing molecular assays

A private company is <u>seeking improvements to sample preparation</u> so that we may neutralize inhibitors and lyse both Gram-positive and Gram-negative bacteria in an enriched sample. The ideal solution or technology should achieve these tasks with only two manual pipette steps: adding the sample to the reaction tube and withdrawing the processed sample.

Must-have requirements are:

- Tightly bind proteins like lysozyme, which can inhibit amplification
- Does not tightly bind proteins like DNA polymerase, Reverse Transcriptases and other commonly used life science enzymes
- Stable in a high-pH solution and still retains inhibitor binding characteristics to proteins like lysozyme

The application takes about one hour to complete.

Deadline: February 29, 2024

۸۸

Institute of Education Sciences: Education Research and Development Center

Through the Education Research and Development Center (R&D Center) program [84.305C], The National Center for Education Research (NCER) supports R&D centers that conduct research and provide national leadership on key education issues that face our nation.

For FY24 R&D Centers competition, IES invites applications for four national R&D centers:

- 1. Improving Rural Education
- 2. K-12 Teacher Recruitment and Retention Policy
- 3. Improving Outcomes in Elementary Science Education
- 4. Using Generative AI to Augment Teaching and Learning in the Classrooms

Deadline: Letter of Intent January 18, 2024

۸۸

NEA: Grants for Arts Projects – LIMITED

<u>Limited submission grant programs</u> are those that indicate a limit on the number of proposals that may be submitted by an institution for a particular deadline. A selection process becomes necessary if more applicants express interest in applying than NDSU is allowed to submit to the grant program.

<u>Notify RCA</u> – This program is First to Notify. Those who notify are given approval to move forward with a full proposal submission on a first come, first serve basis.

Grants for Arts Projects (GAP) provides expansive funding opportunities to

strengthen the nation's arts and culture ecosystem. Through project-based funding, the program supports opportunities for public engagement with the arts and arts education, for the integration of the arts with strategies promoting the health and well-being of people and communities, and for the improvement of overall capacity and capabilities within the arts sector.

A cost share of 1:1 is required.

Upcoming Deadlines: February 15 and July 11, 2024

LIMITED SUBMISSION: Only one application per Institution per fiscal year

۸۸

Neogen Corporation: Mycotoxin detection in grain extracts

<u>Neogen is looking to create</u> HPLC/LC-MS methods or equivalent tests using extractions that are paired with commercially available lateral flow devices. A strong collaborator would have experience in developing HPLC or LC-MS methods to assist us in analytical methods detecting mycotoxins from organic extraction solutions.

Solutions of interest include:

- Testing methods or protocols for detecting mycotoxins through HPLC
- Testing methods or protocols for detecting mycotoxins through LC-MS

The application takes about one hour to complete.

Deadline: February 29, 2024

ΛΛ

New York Historical Society: Fellowship Opportunities

Leveraging its vast collections, the New-York Historical Society's unique <u>fellowship</u> <u>program</u> provides scholars with resources and an intellectual community to develop new research and publications.

Fellowship Opportunities available:

- Helen and Robert Appel Fellowship in History and Technology
- National Endowment for the Humanities Fellowship
- Robert David Lion Gardiner Foundation/Mellon Foundation Fellowship
- George Champion Research Fellowship

Deadline for all Fellowships: February 15, 2024

^ ^

NIH: Addressing Health and Health Care Disparities Among Sexual and Gender Minority Populations (R01 - Clinical Trials Optional)

The purpose of this Notice of Funding Opportunity (NOFO) [PAR-24-077] is to support innovative observational and intervention-based research to identify and characterize the pathways and mechanisms through which health and health care disparities occur among sexual and gender minority populations of minoritized racial/ethnic and socio-economic statuses.

Deadline: <u>NIH Standard Dates</u> (February 5, June 5, October 5)

^^

NIH: Translational Research in Maternal and Pediatric Pharmacology and Therapeutics (R01 Clinical Trial Optional)

The purpose of this notice of funding opportunity (NOFO) [PAR-23-130] is to support translational and clinical research to (1) advance precision medicine in pregnant persons, lactating persons, and children through the development of novel tools, models, and

other technologies that could have a direct clinical or health impact; (2) enhance the understanding of the underlying mechanisms of drug action, including the role of pediatric ontogeny and the dynamic physiological changes that occur during pregnancy and lactation; and (3) discover and develop novel therapeutics or enhance the usage of existing drugs or drug repurposing for safer and more effective medications in pregnant and lactating persons, neonates, and children. The overall goal is to improve safe and effective precision therapeutics for pregnant and lactating persons, fetuses, neonates, and children, including those with disabilities.

Deadline: <u>NIH Standard Dates</u> (February 5, June 5, October 5)

^^

NSF: Collaborative Research in Computational Neuroscience (CRCNS)

Computational neuroscience provides a theoretical foundation and a rich set of technical approaches for understanding the nervous system at all levels, building on the theory, methods, and findings of computer science, neuroscience, and numerous other disciplines to accelerate the understanding of nervous system structure and function, mechanisms underlying nervous system disorders, and computational strategies used by the nervous system. Through the CRCNS program [NSF 24-510], the participating funding organizations support collaborative activities that span a broad spectrum of computational neuroscience research, as appropriate to the missions and strategic objectives of each agency.

Two classes of proposals will be considered in response to this solicitation:

- Research Proposals describing collaborative research projects, and
- Data Sharing Proposals to support sharing of data and other resources.

Upcoming Deadlines: March 7, 2024 (FY24 competition); November 13, 2024 (FY25 competition); November 12, 2025 (FY26 competition)

NSF: DCL - Improving Undergraduate STEM Education - Adaption, Implementation, and Dissemination (IUSE-AID)

This Dear Colleague Letter (DCL) [NSF 24-026] encourages STEM education communities to submit proposals to the Directorate for STEM Education's Improving Undergraduate STEM Education (IUSE:EDU) program (NSF 23-510) that focus on Adaptation and Implementation, and/or Dissemination of proven teaching strategies and learning materials reflecting advances in what is known about undergraduate STEM teaching and learning. Proposals that develop faculty expertise, implement educational innovations, adapt existing educational innovations for specific teaching and learning environments, and disseminate teaching and learning innovations beyond the scale of the efforts that created them are encouraged.

Upcoming Deadlines: January 24, 2024 (Level 1), July 17, 2024 (Levels 2 and 3)

۸۸

NSF: Emerging Mathematics in Biology (eMB)

The Emerging Mathematics in Biology (eMB) program [NSF 24-513] seeks to stimulate fundamental interdisciplinary and potentially transformative research pertaining to the development of innovative mathematical/statistical/computational theories, tools, and modeling approaches to investigate challenging questions of great interest to biologists and public health policymakers. It supports research projects in mathematical biology that address challenging and significant biological questions through novel applications of traditional, but nontrivial, mathematical tools and methods or the development of new theories particularly from foundational mathematics and/or computational/statistical tools, including Artificial Intelligence/Deep Learning/Machine Learning (AI/DL/ML).

Deadline: March 11, 2024

^^

NSF: Future of Semiconductors (FuSe2)

The goal of this Future of Semiconductors (FuSe2) solicitation [NSF 24-521] is to cultivate holistic, co-design approaches to fundamental research and workforce education and

training in order to enable rapid progress in new semiconductor technologies. The future of semiconductor manufacturing will require the design and deployment of diverse new technologies in materials, chemical and materials processes, devices, and architectures through the development of application-driven systems. Partnerships between industry and academic institutions are essential to spurring this innovation, enabling technology transfer, informing research infrastructure needs, and training the future workforce.

Deadline: March 14, 2024

۸۸

NSF: Mind, Machine and Motor Nexus (M3X)

The M3X Program [PD 19-058Y] seeks to spur innovative and path-breaking work that can improve understanding of interaction between human and synthetic actors in a broad range of settings, while also exploring implications for the advancement of fundamental theory, foundational technologies, and meaningful applications. Successful submissions to the M3X program will therefore advance knowledge by exploring the convergence of human and synthetic actors' capabilities and actions during the performance of tasks situated within physics-based environments.

Deadline: Proposals accepted ANYTIME

^^

NSF: Strengthening American Infrastructure

Strengthening American Infrastructure (SAI) is an NSF program [NSF 24-519] seeking to stimulate human-centered, use-inspired, fundamental and potentially transformative research aimed at strengthening America's infrastructure. SAI focuses on how fundamental knowledge about human reasoning and decision-making, governance, and social and cultural processes enables the building and maintenance of effective infrastructure that improves lives and society and builds on advances in technology and engineering. Successful projects will represent a convergence of expertise in one or more social, behavioral or economic sciences, deeply integrated with other disciplines to support substantial and potentially path-breaking fundamental research applied to strengthening a specific focal infrastructure.

RWJF: Evidence for Action: Indigenous-Led Solutions to Advance Health Equity and Wellbeing

The purpose of this call for proposals (<u>CFP</u>) is to support Indigenous-led systematic inquiry to enhance the health and wellbeing of Indigenous Peoples and generate approaches to improve health equity. This will be achieved by funding community-prioritized investigation, elevating and integrating Indigenous cultures and knowledge-building practices. There are two tracks in this CFP. Track 1 – must be a Tribal entity or Indigenous-Serving Organization. Track 2 – not required to be a Tribal entity or Indigenous-Serving Organization.

Deadline: Brief Proposal March 1, 2024; 2pm

^^

RWJF: Systems for Action: Systems and Services Research to Address Systemic Racism

This <u>CFP</u> will provide funding for a new cohort of research studies to produce new, actionable evidence about how to help medical, social, and public health systems work together to address forms of systemic racism. There are two categories of awards: Developmental Research and Impact Research.

Deadline: LOI February 7, 2024; 2pm

USDA: NIFA - Women and Minorities in Science, Technology, Engineering, and Mathematics Fields Program – LIMITED

<u>Limited submission grant programs</u> are those that indicate a limit on the number of proposals that may be submitted by an institution for a particular deadline. A selection process becomes necessary if more applicants express interest in applying than NDSU is allowed to submit to the grant program.

<u>Notify RCA</u> – This program is First to Notify. Those who notify are given approval to move forward with a full proposal submission on a first come, first serve basis.

The purpose of this program [<u>USDA-NIFA-WAMS-010338</u>] is to support research, education/teaching, and extension projects that increase participation by women and underrepresented minorities from rural areas in STEM. NIFA intends this program to address educational needs within broadly defined areas of food and agricultural sciences.

A cost share of 1:1 is required.

Deadline: February 9, 2024

LIMITED SUBMISSION: Only two applications per Institution

۸۸

Looking for more funding opportunities?



RCA subscribes to SPIN by InfoEd Global, a database of more than 40,000 funding opportunities. Through this subscription, SPIN is free for current NDSU faculty, staff, and students.

For more information and to access this database, visit the <u>SPIN page</u> on the RCA website. If you have questions, please contact <u>ndsu.researchdev@ndsu.edu</u>.

Have questions, ideas, or suggestions for the RCA Update?

Contact Us









The Office of Research and Creative Activity (RCA) sends bi-weekly emails to NDSU faculty and staff to provide current information on various topics including funding opportunities, grant program changes, research resources, deadlines, notices, and training.

You are receiving this notification through the NDSU official employee listserv or sub-list. The official listserv refreshes after each pay period.

North Dakota State University does not discriminate on the basis of age, color, disability, gender expression/identity, genetic information, marital status, national origin, public assistance status, race, religion, sex, sexual orientation, or status as a U.S. veteran. Direct inquiries to: Equal Opportunity Specialist, Old Main 201, 701-231-7708 or Title IX/ADA Coordinator, Old Main 102, 701-231-6409.

We collectively acknowledge that we gather at NDSU, a land grant institution, on the traditional lands of the Oceti Sakowin (Dakota, Lakota, Nakoda) and Anishinaabe Peoples in addition to many diverse Indigenous Peoples still connected to these lands. We honor with gratitude Mother Earth and the Indigenous Peoples who have walked with her throughout generations. We will continue to learn how to live in unity with Mother Earth and build strong, mutually beneficial, trusting relationships with Indigenous Peoples of our region.